REMARKS

Claims 1-3 and 5 are rejected by the Examiner under 35 USC 103 as being unpatentable over Katayama, U.S. Patent 6,458,035 in view of Gobush et al., U.S. Patent 5,471,383. This rejection is respectfully traversed.

It is noted, with appreciation, that the Examiner has indicated that claim 4 is allowed. In order to expedite prosecution of the present application, claims 1 and 5 have been cancelled in the present application and claims 2 and 3 have been amended to so as to be dependent from allowable claim 4.

Accordingly, it is now believed that the present application is in condition for allowance. Thus, reconsideration of the rejection and allowance of claims 2, 3 and 4 of the present application are respectfully requested.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Joseph A. Kolasch (Reg. No. 22,463) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a one-month extension of time for filing a reply in connection with the present application, and the required fee of \$110 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment(s): Abstract of the Disclosure

JAK/njp

(Rev. 02/12/2004)

AMENDMENTS TO THE SPECIFICATION

IN THE ABSTRACT OF THE DISCLOSURE:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure.

The changes to the Abstract are shown below:

ABSTRACT OF THE DISCLOSURE

A flying sphere is photographed twice at a predetermined time interval and two static images thus obtained are used to measure a rotation the rotation of the sphere through an image processing based on a on the recognition mark of a of the surface of the sphere. The recognition mark includes a central mark (13) having a directivity and a rotating angle calculating mark (15) provided to surround the central mark (13). The central mark (13) includes a rectangle (17) and a circle (19) provided apart from the rectangle (17) adjacently adjacent to one of short sides of the rectangle (17). Three or more rotating angle calculating marks (15) are provided. Respective center positions of the rotating angle calculating marks (15) are present in a region provided apart from a center position of the central mark (13) by 13 mm to 17 mm.